

West Lake Update – EPA to Conduct Additional Sediment Sampling at the West Lake Landfill

In January, the Potentially Responsible Parties (PRPs) collected three sediment samples at the West Lake Landfill as part of additional characterization work for Area 1 and Area 2. EPA required two additional sediment samples to be collected in March in response to the large rain events that occurred in late December and early January. For both of these sampling events, EPA collected a split sample from each location.

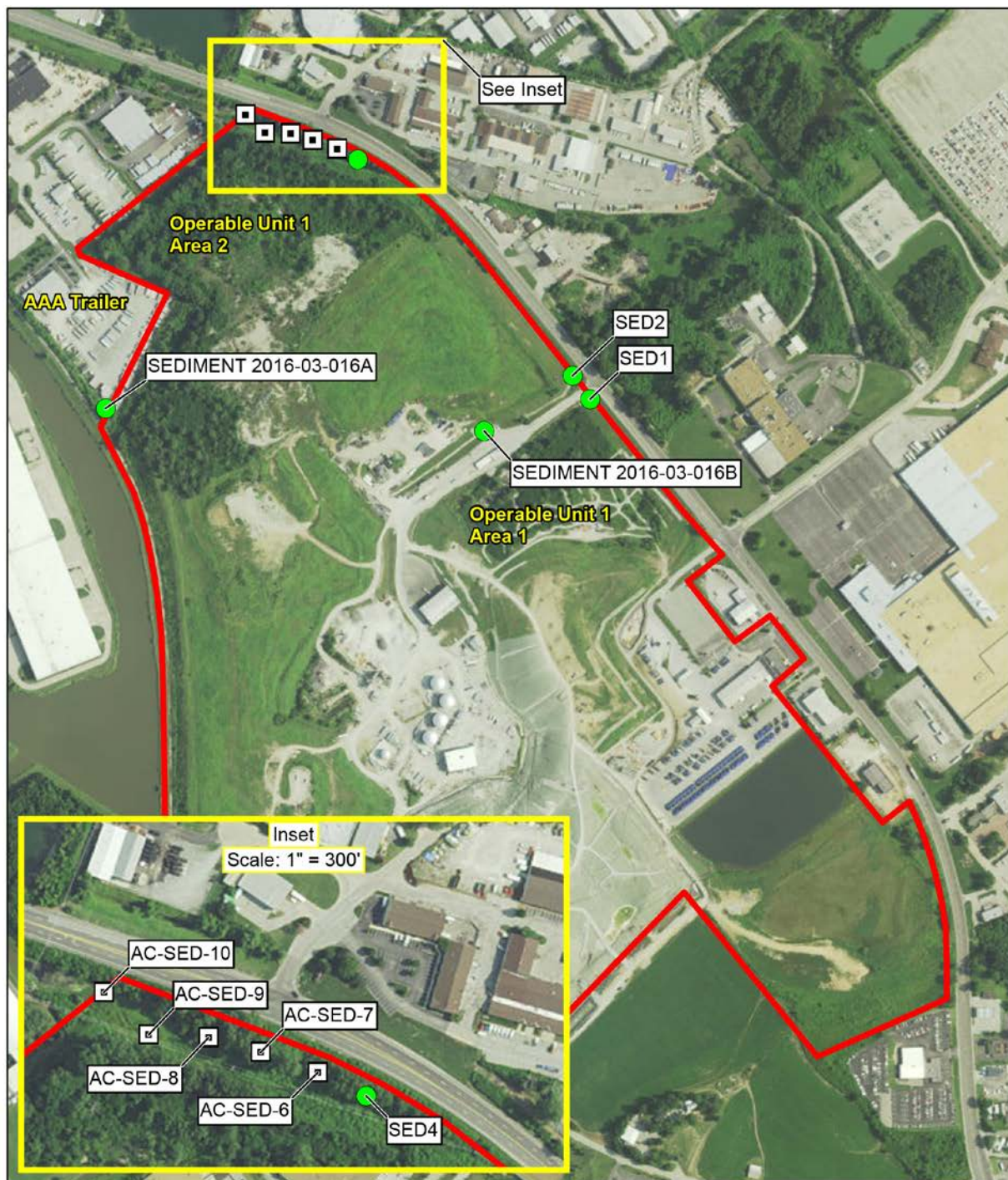
Based on the analytical results, EPA plans to perform additional sediment sampling. This decision follows EPA's review of the analytical results from sediment sampling, where one of the five samples collected in January and March 2016 has been determined to contain radionuclides consistent with the Radiologically Impacted Material (RIM) at the West Lake Landfill. Specifically, the combined thorium concentrations for the PRPs' Sediment Sample 4 and EPA's duplicate sample from that same location are 16.16 picocuries per gram (pCi/g) and 20.63 pCi/g respectively. At the West Lake Landfill, the definition of RIM includes combined thorium concentrations at 7.9 pCi/g and higher.

The Sediment Sample 4 is located in an on-site low lying drainage area in the north western portion of the Site (see map). This drainage area is outside of the existing fencing but is inside the St. Charles Rock Road property boundary and in a densely vegetated area with limited access.

While this sediment sample result exceeds the definition of RIM for the site, the concentrations are considerably below what would be considered a concern for an outdoor worker exposure. Specifically, the Preliminary Remediation Goal (PRG) default for an outdoor worker is 1,970 pCi/g. In addition, the PRG for residential and residential use with a garden are 493 pCi/g and 5.18 pCi/g, respectively for thorium-230.

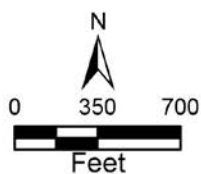
As a proactive measure, the agency has directed the PRPs to collect five additional sediment samples to the northwest of Sediment Sample 4 and to also perform an overland gamma survey of the area. The five samples will be collected along the drainage feature in locations that appear most likely to contain deposited sediment. EPA will again collect a split sample from each of these additional locations. EPA has updated the existing Quality Assurance Project Plan (QAPP) used in the January and March sampling events for use in the collection of these additional samples. Weather permitting, EPA expects the work to begin this week. The QAPP is available on our website: <https://semspub.epa.gov/work/07/30285889.pdf>

The figure included below depicts the locations of the samples taken in January and March as well as the five proposed sampling locations for the current effort. EPA remains committed to protecting human health and environment at the site as we continue our work leading up to a proposed decision on the final remedy by the end of this year.



Legend

- Previous Sediment Sample Location (January to March 2016)
- Proposed Sediment Sample Location
- West Lake Landfill



West Lake Landfill
Bridgeton, Missouri

Figure 1
Proposed Sediment Sampling Locations



Source: ESRI, ArcGIS Online, World Imagery, 2014

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